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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,811	07/17/2003	Alistair Edwin May	1417-227	8991

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EXAMINER	
SHERMAN, STEPHEN G	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/620,811	MAY, ALISTAIR EDWIN	
	Examiner	Art Unit	
	Stephen G. Sherman	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1-2-04
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 and 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Arrigo et al. (US 6,781,570).

Regarding claim 1, Arrigo et al. disclose a radio-capable device, comprising: a data collection unit for collecting data (Figure 1a. MCU 120 and optical sensor 115), and having a normal operating mode, in which it is enabled for collecting data, and a low-power mode (Column 6, lines 55-63); a radio communication unit for transmitting over a radio channel data collected by the data collection unit (Figure 1a. Transmitter 130); and a radio channel sensor coupled to the radio communication unit for sensing at least one physical characteristic of the radio channel, and arranged to cause the data collection unit to enter the normal operating mode if the physical characteristic meets a pre-set threshold (Column 5, lines 25-37. The examiner interprets that the physical characteristic that is being sensed is the signal containing the stock prices and that the

switch would remain closed would mean that the device would enter normal operating mode, and the fact that the signals containing stock prices can be detected would mean that there is a radio channel sensor.).

Regarding claim 2, Arrigo et al. disclose a radio-capable device as claimed in claim 1, wherein the radio channel sensor is arranged to sense the said characteristic by means of at least one antenna of the radio communication unit (Figure 1a. Transmitter 130 and column 5, lines 33-37.).

Regarding claim 3, Arrigo et al. disclose a radio-capable device as claimed in claim 1, wherein the data collection unit is capable of collecting user inputs (Figure 1a. User interface 125).

Regarding claim 4, Arrigo et al. disclose a radio-capable device as claimed in claim 3, wherein the data collection unit comprises an optical sensor for sensing movement of the device relative to a surface external to the device (Figure 1a. Optical sensor 115).

Regarding claim 5, Arrigo et al. disclose a radio-capable device as claimed in claim 4, wherein the optical sensor is fully or partially disabled in the low-power mode (Column 6, lines 51-63).

Regarding claim 6, Arrigo et al. disclose a radio-capable device as claimed in claim 3, wherein the device is a mouse or a trackball (Column 3, lines 15-17).

Regarding claim 13, Arrigo et al. disclose a radio-capable device as claimed in claim 1, wherein the device is a wireless device (Column 2, lines 19-21).

Regarding claim 14, Arrigo et al. disclose a radio-capable device as claimed in claim 1, wherein the device is powered by a battery (Figure 1a. Item 145 and column 4, lines 20-25).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrigo et al. (US 6,781,570) in view of Hinckley et al. (US 2002/0021278).

Regarding claim 7, Arrigo et al. disclose a radio-capable device as claimed in claim 1. Arrigo et al. fail to teach of a radio-capable device wherein the physical characteristic is the tendency of the channel to return to the radio communication unit radio signals transmitted by the radio communication unit. Hinckley et al. disclose a radio-capable device wherein the physical characteristic is the tendency to return to the radio communication unit radio signals transmitted by the radio communication unit (Figure 1 and paragraph [0042] and paragraph [0043]. The examiner interprets that detecting the signals being reflected is the tendency to return the signals that were transmitted as stated in paragraph [0043] and that the transmitter 264 and receiver 266

are the radio communication unit since they are used for transmitting and receiving data.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Arrigo et al. and Hinckley et al. in order to create a device that can sense when it is being handled in order to perform functions without requiring the user to perform any additional actions.

Regarding claim 8, Arrigo et al. disclose a radio-capable device as claimed in claim 1. Arrigo et al. fail to teach of a radio-capable device wherein the physical characteristic is one or more of reflection of radio signals transmitted by the device, absorption of signals transmitted to or by the device, and de-tuning of one or more antennas of the device. Hinckley et al. disclose of radio-capable device wherein the physical characteristic is one or more of reflection of signals transmitted by the device, absorption of signals transmitted to or by the device, and de-tuning of one or more antennas of the device (Paragraph [0043]. The examiner interprets that that since reflected signals are received, that this means that they are absorbed and that since the device is capable of determining these reflected waves that the antenna would also be detuned.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Arrigo et al. and Hinckley et al. in order to create a device that can sense when it is being handled in order to perform functions without requiring the user to perform any additional actions.

Regarding claim 9, Arrigo et al. and Hinckley et al. disclose a radio-capable device as claimed in claim 7. Arrigo et al. also disclose a radio-capable device wherein the radio communication unit comprises a transmitter and a receiver which share an

antenna (Figure 1a. Item 130 and column 5, lines 33-37). Hinckley et al. discloses a radio-capable device wherein the sensor is arranged to sense the level of signals transmitted by the transmitter that are received by the receiver (Paragraph [0043] and [0044] and Figure 1 items 262, 264 and 266, where the radio sensor unit, item 262, senses the level of signals transmitted by 264 and received by 266 as stated in paragraph [0044].). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Arrigo et al. and Hinckley et al. in order to create a device that can sense when it is being handled in order to perform functions without requiring the user to perform any additional actions.

Regarding claim 10, Arrigo et al. and Hinckley et al. disclose a radio-capable device as claimed in claim 7. Hinckley et al. also discloses a radio-capable device wherein the radio communication unit comprises a transmitter having a first antenna and a receiver having a second antenna (Figure 1, items 264 and 266, and Figure 3. The examiner interprets that since the transmitter, 264, and the receiver, 266 are separated in Figure 3 that they would have separate antennas.) and the radio channel sensor (Figure 1, item 262) is arranged to sense the level of signals transmitted by the transmitter that are received by the receiver (Paragraph [0043] and [0044] and Figure 1 items 262, 264 and 266, where the radio sensor unit, item 262, senses the level of signals transmitted by 264 and received by 266 as stated in paragraph [0044].). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Arrigo et al. and Hinckley et al. in order to create a device that can sense

when it is being handled in order to perform functions without requiring the user to perform any additional actions.

Regarding claim 11, Arrigo et al. and Hinckley et al. disclose a radio-capable device as claimed in claim 9. Hinckley et al. also disclose a radio-capable device wherein the characteristic is a change in the sensed level (Paragraph [0044]. The examiner interprets that since the items are in a range level of distance that the level is sensed between the ranges.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Arrigo et al. and Hinckley et al. in order to create a device that can control the power mode of the device based on whether it is being handled and/or whether it is being gestured toward.

Regarding claim 12, Arrigo et al. and Hinckley et al. disclose a radio-capable device as claimed in claim 11. Hinckley et al. also disclose a radio-capable device wherein the characteristic is a change in the sensed level of greater than a pre-set amount in pre-set time (Paragraphs [0044] and [0046]. The examiner interprets that in paragraph [0044] since there are three ranges of values that a change in the level is sensed and that since the 0 to 7 centimeters range is considered close, that there is a pre-set amount which the level could be less than or greater than. In paragraph [0046] the examiner interprets that the pulsing done a few times per second would be a pre-set time in which the level would be sensed.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Arrigo et al. and Hinckley et al. in order to create a device that can control the power mode of the device based on whether it is being handled and/or whether it is being gestured toward.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS

REGINA LIANG
PRIMARY EXAMINER

14 September 2005